



State of Ohio Environmental Protection Agency

2347

Southwest District Office

401 East Fifth Street
Dayton, Ohio 45402-2911

TELE: (937) 285-6357 fax: (937) 285-6249

Bob Taft, Governor
Maureen O'Connor, Lt. Governor
Christopher Jones, Director

June 23, 1999

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: DCN NO. 1700-094; LCS REPAIR NORTH OF MH #2

FERNALD
LOG M-01316
JUN 24 8 27 AM '99
FILE: 6446.3
LIBRARY:

Dear Mr. Reising:

Consistent with our new procedures to provide written responses to all Design Change Notices, we are providing this letter regarding the above-referenced DCN.

Since we are all aware of the many problems that have plagued the leachate transmission system since construction began in 1997, there is no need to re-iterate those problems again. We will limit our hindsight to re-stating our opinion that there were potential benefits to constructing a permanent fix instead of the slip-lining repair. A permanent fix would have been more reliable and could have eliminated all couplings rather than just the ones suspected of leaking. A permanent fix could have included clean outs rather than rendered them inoperable. We do not see the time required to design a permanent line between Manholes 1 and 3 as being significant. In either case, it was a judgement call to choose a temporary repair and we will all have to live with the decision until a permanent line is installed.

With regard to this most recent problem, Ohio EPA is at a loss to understand how the carrier pipe could have been breached during containment pipe repair without any notice by either the workers or the redundant layers of QA/QC that should be observing the activity. Our dismay is compounded by the failure to inspect the carrier pipe after removal of the containment pipe. The use of an air pressure test that did not detect the leak raises additional questions regarding the testing techniques. These successive failures are indicative of a system focused on arbitrary deadlines rather than production of a quality product. This is a situation that can only be remedied by a culture change that focuses on quality workmanship.

Again, we believe a permanent fix is the most appropriate path forward for the required repairs between MH 1 & 2. However if DOE insists on pursuing more temporary repairs, we can find no regulatory basis for disapproval of the DCN. The DCN is approved on the

S:\OU2\MH13TEMP.WPD

000001

Mr. Johnny Reising
June 23, 1999
Page 2

conditions that as-built information is recorded as specified and the system is successfully hydrostatically tested in accordance with approved procedures.

The design of the Permanent Leachate Transmission System (PLTS) should begin soon and construction should be completed during calendar year 2000. The PLTS design should incorporate the following lessons learned;

1. SDR 11 HDPE pipe should be used exclusively.
2. Butt fusion joints should be the only approved method of joining lengths of HDPE pipe. Work should be sequenced so that a maximum of one split sleeve coupling should be permitted only between fixed pipe sections, i.e. between the manholes. No electro-fusion couplings should be permitted.
3. Clean-outs should be installed at the intervals specified in the temporary system design.
4. Manholes for all the cells that are currently anticipated to be needed should be installed next construction year. This will eliminate the need for additional couplings that would be required if the manholes were retro-fitted into an existing leachate line.
5. Manholes should be designed with ladders, lights and the leak monitoring hardware that has recently been developed.

If you have any questions, please contact Tom Ontko or me.

Sincerely,

for Tom Ontko

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Francie Hodge, Tetra Tech EM Inc.
Ruth Vandergrift, ODH